

# Application Distances for Applying Animal Manure and Organic By-Products

Alabama Guide Sheet No. AL 590



### **Definition**

Application distances are separation distances between land application sites for animal manures, organic by-products, and areas that are to be protected. Using application distances will help prevent pollutants such as nutrients, organics, bacteria, and other contaminants from migrating to surface and ground waters.

### **General Information**

Application distances should especially be used between animal manure, organic by-product application sites, and water sources which could potentially be contaminated with polluted runoff. An application distance between application sites and these water sources should contain a good vegetative stand to help filter pollutants from runoff after heavy rain events (See footnotes 2 and 5).

Because of the odor and nuisance potential associated with animal manures and other wastes, application distances are also needed near public and residential areas. These buffers mainly provide separation distance. However, trees and/or shrub screens keep the application site from public view and may even influence air movement.

# **Recommended Application Distances**

The table on the next page gives recommendations for minimum application distances. These are general recommendations. Site specific conditions may warrant adjustments to these distances. Producers who use appropriate application distances demonstrate a "good-faith" effort toward protecting the environment and reducing odor complaints from neighbors.

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Table 1. Recommended Application Distances For Animal Manure and Organic By-Product Application

Object, Site	<u>Situation</u>	Application Distance (ft.) from Object, Site
Well	Located up-gradient of application site	200
Well	Located down-gradient of application site	300
Waterbody or Stream <sup>1/</sup>	Waste applied to pasture <sup>3/,</sup> hayland, or cultivated land <sup>4/</sup>	50 <sup>2/</sup>
Public Road	Aerial irrigated wastewater	100
Public Road	Waste applied with spreader truck	50
Public Use Area <sup>5/</sup>	Dry waste Liquid waste Aerial Irrigated wastewater	100 200 500
Property Line	All	25

Waterbody includes pond, lake, wetland, or sinkhole. Stream includes both perennial and intermittent streams.

## References

NRCS AL Conservation Practice Standards

Code 393 - Filter Strip

Code 391A - Riparian Forest Buffer

Code 633 - Waste Utilization

Code 590 - Nutrient Management

On edges of the application field where runoff occurs to environmentally sensitive areas and to non-vegetated concentrated flow areas within the field, application distances must include a vegetated filter at least 50 feet wide that is established to permanent grasses (filter strip) with a stem density of at least 1 per square inch. If the filter incorporates a riparian forest buffer in accordance with NRCS Conservation Practice Standard, Riparian Forest Buffer – Code 391A, the permanent grass filter strip may be 20 feet wide. The vegetated width must be located adjacent to the application field or concentrated flow area and be shaped so that flow from runoff is uniform (sheet flow) and does not concentrate.

<sup>&</sup>lt;sup>3/</sup> If good grazing management (i.e. rotational grazing) is not used on pasture land, the vegetative filter must be protected from over grazing with a fence.

<sup>&</sup>lt;sup>4/</sup> Cultivated land for waste application must have adequate erosion control practices in place.

Public use areas include a dwelling (other than producer), church, hospital, school, park, etc.